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MEDIUM-MU TRIODE— THREE-PLATE TETRODE

9-PIN MINIATURE TYPE

For harmonic-generator applications

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:		
Voltage (AC or DC)	6.3 ± 10%	volts
Current	0.45	amp
Direct Interelectrode Capacitances:°		
Triode Unit:		
Grid to plate	1.4	μμf
Grid to cathode & heater	2.6	μμf
Plate to cathode & heater	1	μμf
Tetrode Unit:		
Grid No.1 to plate No.1	0.06 max.	μμf
Grid No.1 to cathode & heater, plate No.3, plate No.2, and grid No.2	4.5	μμf
Plate No.1 to cathode & heater, plate No.3, plate No.2, and grid No.2	1.4	μμf
Tetrode grid No.1 to triode plate	0.35 max.	μμf
Tetrode plate No.1 to triode plate	0.008 max.	μμf

Characteristics, Class A_1 Amplifier:

Triode Unit

Plate Voltage	100	volts
Grid Voltage	−1	volt
Amplification Factor	40	
Plate Resistance (Approx.)	7400	ohms
Transconductance	5400	μmhos
Plate Current	7.9	ma
Grid Voltage (Approx.) for plate μa = 100	−7	volts

Tetrode Unit with plates No.2 and No.3 connected to cathode

Plate-No.1 Voltage	250	volts
Grid-No.2 Voltage	250	volts
Grid-No.1 Voltage	−2	volts
Plate-No.1 Resistance (Approx.)	0.75	megohm
Transconductance, Grid No.1 to Plate No.1	4400	μmhos
Plate-No.1 Current	7.3	ma
Grid-No.2 Current	1.4	ma
Grid-No.1 Voltage (Approx.) for plate-No.1 μa = 100	−7	volts

° With external shield JEDEC No.315 connected to cathode.

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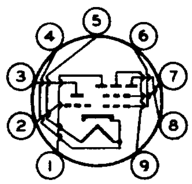
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MEDIUM-MU TRIODE—
THREE-PLATE TETRODE

Mechanical:

Operating Position. . . . . Any
Maximum Overall Length. . . . . 2-3/16"
Maximum Seated Length . . . . 1-15/16"
Length, Base Seat to Bulb Top (Excluding tip). 1-9/16" ± 3/32"
Diameter. . . . . 0.750" to 0.875"
Dimensional Outline . . . . *See General Section*
Bulb. T6-1/2
Base. . . . . Small-Button Noval 9-Pin (JEDEC No.E9-1)
Basing Designation for BOTTOM VIEW. 9KP

Pin 1 - Tetrode Plate No.3
Pin 2 - Triode Grid
Pin 3 - Triode Plate
Pin 4 - Heater, Cathode
Pin 5 - Heater



Pin 6 - Tetrode Grid No.1
Pin 7 - Tetrode Grid No.2
Pin 8 - Tetrode Plate No.2
Pin 9 - Tetrode Plate No.1

HARMONIC-GENERATOR SERVICE

Maximum Ratings, *Design-Maximum Values:*

	Triode Unit	*Tetrode Unit*	
PLATE VOLTAGE.	275 max.	-	volts
PLATE-No.1 VOLTAGE	-	275 max.	volts
PLATE-No.2 VOLTAGE	-	200 max.	volts
PLATE-No.3 VOLTAGE	-	200 max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE	-	275 max.	volts
GRID-No.2 VOLTAGE.	-	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Negative-bias value. . .	40 max.	40 max.	volts
Positive-bias value. . .	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 137.5 volts. . .	-	0.45 max.	watt
For grid-No.2 voltages between 137.5 and 275 volts.	-	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*	
PLATE DISSIPATION.	1.7 max.	-	watts
PLATE-No.1 DISSIPATION . .	-	2.3 max.	watts
PLATE-No.2 DISSIPATION . .	-	0.3 max.	watt
PLATE-No.3 DISSIPATION . .	-	0.3 max.	watt

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MEDIUM-MU TRIODE— THREE-PLATE TETRODE

Typical Operation:

Tetrode Unit with separate plate operation

Plates-No.1, No.2, and No.3 Voltage	100	volts
Grid-No.2 Voltage	50	volts
Grid-No.1 Voltage	-1	volt
Plate-No.1 Current	1.6	ma
Plate-No.2 Current	0.04	ma
Plate-No.3 Current	0.04	ma
Grid-No.2 Current	0.3	ma
Transconductance (Approx.):		
Grid No.1 to plate No.1	2500	μmhos
Grid No.1 to plate No.2	70	μmhos
Grid No.1 to plate No.3	70	μmhos

Maximum Circuit Values:

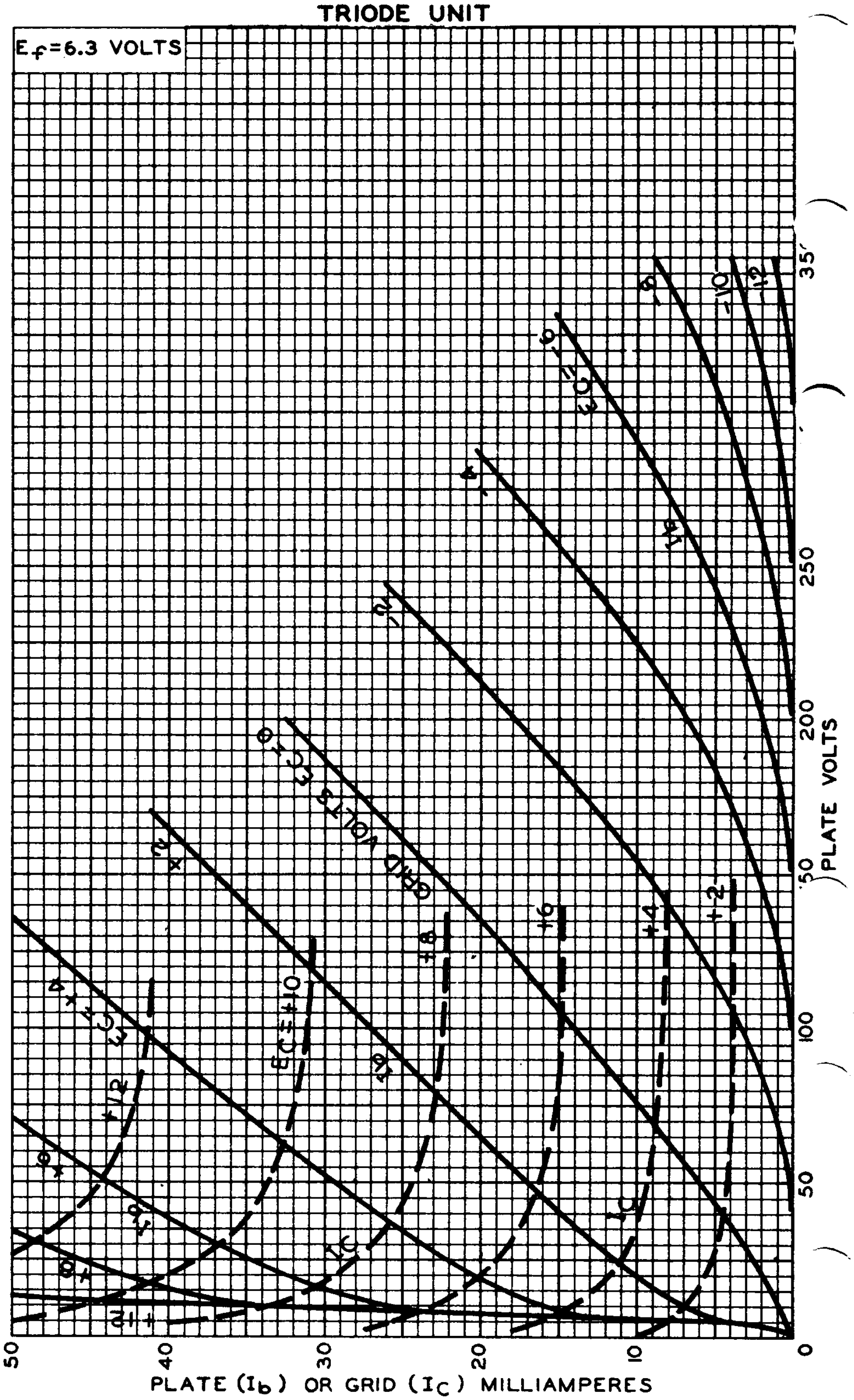
	Triode Unit	Tetrode Unit	
Grid-No.1-Circuit Resistance:			
For fixed-bias operation	0.5 max.	0.5 max.	megohm

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AVERAGE CHARACTERISTICS

TRIODE UNIT



ELECTRON TUBE DIVISION

92CM-10220

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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AVERAGE CHARACTERISTICS
TETRODE UNIT

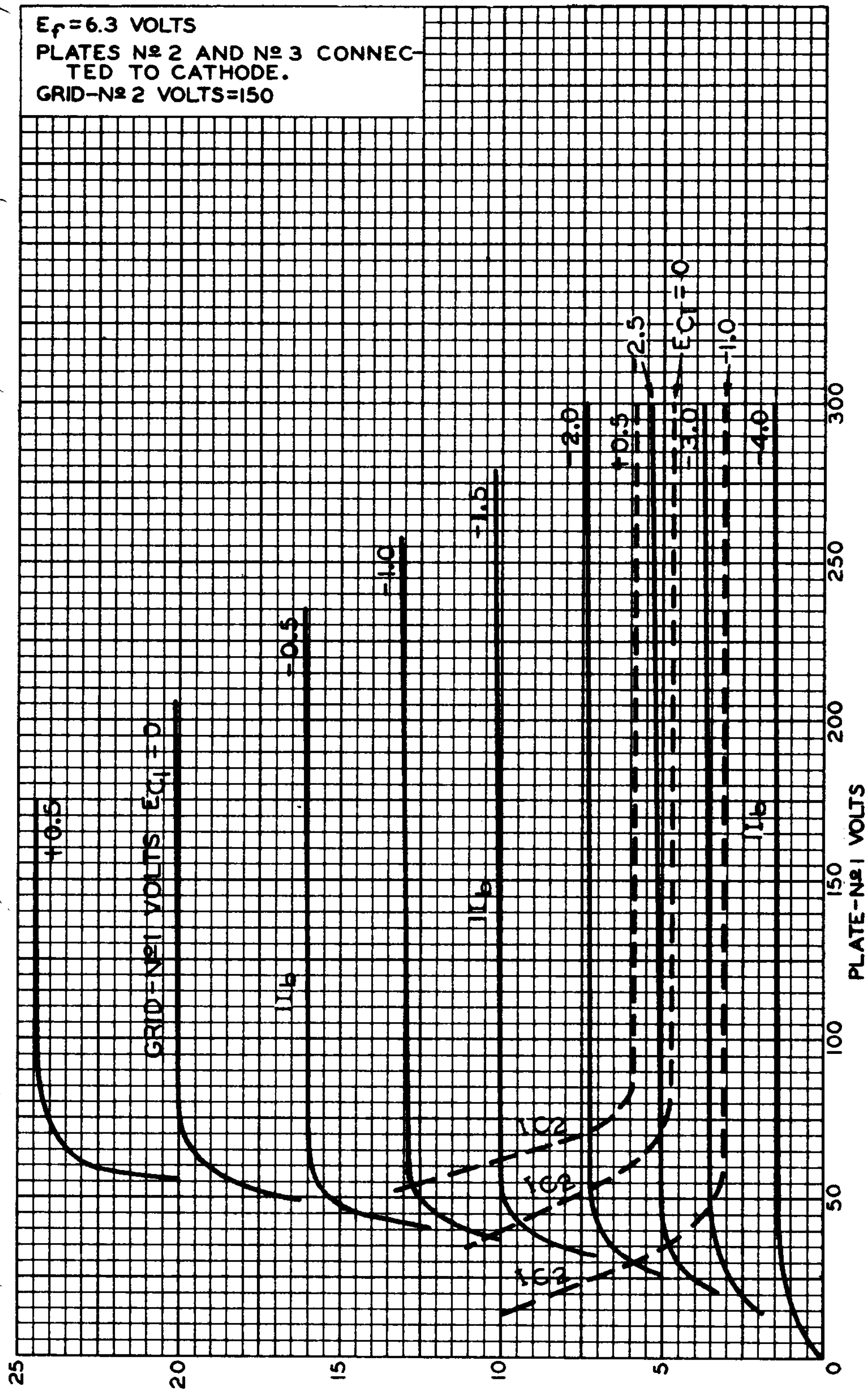


PLATE-No1 (I_b) OR GRID-No 2 (I_{c2}) MILLIAMPERES

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92CM-10221